UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Washington, D.C. 20460

OFFICE OF
CHEMICAL SAFETY AND
POLLUTION PREVETION
Antimicrobial Division

6/6/2016

DP BARCODE: 432193

MRIDs: 496818-01

SUBJECT: DrySan Duo

REG. NO. OR FILE SYMBOL: 1677-247

DOCUMENT TYPE: Product Chemistry Review

Manufacturing-use product [ ] **OR** **End-use product[X]**

INGREDIENTS (PC Codes): 047501, 069105, 069149, 000595, 069165, and 069166

CAS Number: 67-63-0, 68424-85-1, 7173-51-5, 7782-84-1, 32426-11-2, and 5538-94-3

TEST LAB:

SUBMITTER: Ecolab, Inc.

GUIDELINE:

COMMODITIES:

REVIEWER: Sergey Alekseyev **ORGANIZATION:** AD/PSB/CTT

APPROVER: Karen P. Hicks **APPROVED DATE:**

COMMENT:

TO: Julie Chao/Monica Randolf
PM Team 33

FROM: Sergey Alekseyev, Chemist
Product Science Branch, CT Team
Antimicrobials Division (7510P)

THRU: Karen P. Hicks, CT Team Leader
Product Science Branch
Antimicrobials Division (7510P)

APPLICANT:

Action code: (362) Formula Change; Technical

Due out date: 04/23/2016

Product Formulation

Active Ingredient(s):	**% by wt.**
Isopropanol	10.89
BTC-835 (Alkyl* dimethyl benzyl ammonium chloride *(50% C14, 40% C12, 10% C16))	0.016
Bardac 2250 (1-Decanaminium, N-decyl-N,N-dimethyl-, chloride)	0.007
Hydrogen peroxide	0.045
Bardac 2050 (1-Decanaminium, N,N-dimethyl-N-octyl-, chloride)	0.012
Bardac LF (1-Octanaminium, N,N-dimethyl-N-octyl-, chloride)	0.005

BACKGROUND:

Ecolab, Inc., provided MRID No. 496818-01 and a label, dated 04/15/2016. The registrant is requesting approval of Storage Stability and Corrosion Characteristics studies in support for the product DrySan Duo, EPA Reg. No. **1677-247**. Product chemistry review, dated 07/28/2014, DP 421074, approved Product Chemistry data and Physical and Chemical Characteristics of the subject product except for Storage Stability and Corrosion Characteristics studies which were not accomplished then.

FINDINGS:

1. Storage Stability study has been carried out by measuring the content of the active ingredient at the beginning of a test period and after 4 weeks at 40 ± 2 °C using titration method for Hydrogen Peroxide, potentiometric method for quat, and gas chromatography for Isopropyl alcohol. Specimens of the subject product have been stored in commercial containers (HDPE). The content of the active ingredient did not change during all test periods as follows:

Test period	**The content of AI, weight %**		
	Hydrogen Peroxide	**Quat**	**Isopropanol**
Initial	0.0465	0.0411	10.7
14 days	0.047	0.0427	10.2

The subject product is stable after 4 weeks at 40 ± 2 °C.

2. Corrosion Characteristics study has not revealed any signs of a corrosion attack after 4 weeks at 40 ± 2 °C.

3. Standard Storage Stability and Corrosion Characteristics studies should be carried out after 1 year at room temperature. Accelerated Storage Stability and Corrosion Characteristics studies should be carried out after 14 day at 54 °C. Therefore Guidelines 830.6317 and 830.6320 have not been satisfied.

CONCLUSIONS:

The registrant will satisfy all requirements pertinent to Storage Stability and Corrosion Characteristics studies for registration of EPA Reg. No. **1677-247** after submission of studies according to Guidelines 830.6317 and 830.6320, see Finding 3.